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Summary Results of the 1982 NACUBO Comparative Performance Study and Investment Questionnaire

Typical Portfolio of Reporting Institutions—1982

Annual return for year ended June 30, 1982	—0.93%
Annual return over prior three years	8.31%
Annual return over prior five years	7.70%
Annual return over prior ten years	5.21%
Asset composition as of June 30, 1982	
Stocks	52.4%
Bonds	28.0%
Cash equivalents	13.8%
Real estate	2.7%
Miscellaneous	3.1%
Portfolio beta coefficient—based on prior ten years' data	0.61
Stock turnover during prior year	28.0%
Bond turnover during prior year	19.6%
Median endowment principal per FTE student (independent institutions)	$13,900
Median endowment principal per faculty member (independent institutions)	$170,000

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NACUBO
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Summary Results of the 1982 NACUBO Comparative Performance Study and Investment Questionnaire

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Preface

This summary report contains information on the investments of college and university endowment funds.

The NACUBO Comparative Performance Study (CPS) has been prepared annually since 1971. It initially provided participating institutions with comparative performance data on their investment pools; in recent years, the CPS has been expanded to include a detailed investment questionnaire, which covers other pertinent information relating to endowment funds and their management. Each year, considerable information is published in the *detailed* CPS report, which includes a variety of data of interest to participating institutions. This *summary* CPS report is designed for those who are interested in and concerned about endowment funds, but who prefer a condensed summary of findings.

Each participating institution has been provided with one copy of the detailed CPS report. Information in that report, coded for confidentiality, can be referred to when making comparisons to the larger endowment data base. Copies of the detailed CPS report are available from NACUBO, One Dupont Circle, Washington, D.C. 20036, at $30 each for NACUBO members and $50 each for nonmembers; all orders must be prepaid.

Members of the Investments Committee hereby convey their thanks to the many persons who made this study possible. These include business officers who voluntarily supplied data and answered the questionnaire; Bruce M. Dresner, of Dartmouth College, who served as survey coordinator in producing the detailed report; and Dartmouth College, which provided the use of its computer.

Investments Committee 1982-83

Rodney H. Adams, Chairman, *Stanford University*
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Leigh Jones, *Berea College*
Frederick F. Moon, *Pomona College*
John Ostrom, *Cornell University*

Investment Performance

NACUBO compiles data on endowment funds each year. A detailed investment questionnaire is sent in early fall to all endowed institutions of higher education that are known to be interested in the CPS. Timing of the questionnaire is based on a June 30 fiscal year-end, and responses are requested by the end of the calendar year in order to allow institutions to use information prepared as part of their fiscal year-end financial reporting. The ability of NACUBO to report in a timely fashion in the Comparative Performance Study is largely determined by the responsiveness of the participants in returning completed questionnaires.

In the 1982 study, 194 institutions participated and supplied the market value of their endowments. These institutions had endowment and life income funds of approximately $17.5 billion. The total for all U.S. college and university endowment funds was $23.5 billion, according to the most recent (1981) HEGIS data (one year's difference between NACUBO and HEGIS data). A list of participating institutions, ranked by order of endowment size, is provided in table 1.

Table 1

Endowment and Life Income Fund Assets
Ranked by Endowment Market Value at June 30, 1982

(000 omitted)

Institution	Life Income Funds	Endowment Funds
1 Harvard University	$ 40,111	$ 1,711,310
2 The University of Texas System	3,778	1,626,210 (A)
3 Princeton University	6,655	885,772
4 Columbia University	4,898	772,562
5 Yale University	6,200	740,600
6 Stanford University	89,703	680,621 (A)
7 Massachusetts Institute of Technology	9,587	466,977
8 University of Chicago	11,000	394,200
9 Rice University	10,364	333,487
10 Northwestern University	15,599	322,286 (A)
11 Cornell University	23,384	317,592
12 New York University	1,730	308,500 (A)
13 Washington University	6,039	302,200
14 Rockefeller University	325	240,563
15 Dartmouth College	19,297	230,071
16 Johns Hopkins University	4,718	223,994
17 University of Pennsylvania	8,154	218,250
18 University of Notre Dame	3,611	203,767
19 California Institute of Technology	26,260	192,426 (S)
20 Vanderbilt University	25,418	183,889
21 University of Southern California	21,546	182,925
22 University of Virginia	272	154,228
23 Duke University	7,244	151,381
24 McGill University	0	147,700 (M)
25 Case Western Reserve University	10,016	141,222
26 Wellesley College	9,030	126,224
27 Smith College	0	125,150
28 Carnegie-Mellon University	5,553	124,176
29 Wesleyan College	749	121,964
30 Brown University	5,786	121,041
31 University of Delaware	620	119,168

	Institution	Life Income Funds	Endowment Funds
32	University of Michigan	$ 5,977	$ 115,309
33	Southern Methodist University	0	110,368 (M)
34	University of Cincinnati	4,154	103,421
35	Baylor University	14,549	101,639 (M)
36	Vassar College	8,887	98,370
37	University of Pittsburgh	286	98,262
38	Oberlin College	0	95,924
39	Loyola University	191	95,059
40	Amherst College	3,031	94,412
41	Rensselaer Polytechnic Institute	4,145	94,191
42	Ohio State University	793	94,165
43	Berea College	2,183	91,161
44	Wake Forest University	545	89,151
45	University of Richmond	485	86,768
46	Grinnell College	3,120	83,220
47	Georgetown University	1,459	76,479
48	Pomona College	34,790	72,765
49	Brandeis University	4,443	71,931
50	Lehigh University	4,948	70,905
51	Tulane University	6,343	67,679
52	Middlebury College	1,720	66,383
53	Lafayette College	2,357	65,142
54	Thomas Jefferson University	567	60,149
55	Carleton College	2,607	60,035
56	State University of New York	26	59,758 (Mr)
57	Rochester Institute of Technology	1,066	58,622
58	Mount Holyoke College	3,027	58,382
59	Syracuse University	8,304	56,012
60	Saint Louis University	1,096	55,572
61	Boston University	1,537	55,064
62	University of Miami	5,824	51,818 (M)
63	Rutgers, The State University of New Jersey	0	49,404
64	Occidental College	9,491	49,226
65	Bryn Mawr College	0	48,977 (M)
66	University of Wisconsin System	0	47,040
67	Earlham College	570	46,299
68	Baylor College of Medicine	0	44,491
69	Trinity College (Connecticut)	670	44,373
70	Academy of the New Church	0	44,186
71	Cooper Union	154	43,890
72	Bucknell University	845	42,994
73	Worcester Polytechnic Institute	955	42,694
74	University of Missouri	1,172	42,108
75	Kansas University Endowment Association	3,642	41,873
76	Colgate University	7,856	41,415 (M)
77	University of North Carolina (Chapel Hill)	646	41,377
78	Hamilton College	1,876	39,544
79	Southwestern University	176	37,853
80	Southwestern at Memphis	2,310	37,409
81	Radcliffe College	1,018	37,220
82	Hampton Institute	0	36,031
83	Haverford College	917	35,773
84	Colorado College	0	34,720
85	Agnes Scott College	0	34,627
86	Willamette University	1,643	34,118 (M)
87	Drew University	0	33,860
88	University of Santa Clara	3,288	32,168
89	University of Houston System	0	31,952 (A)
90	Whitman College	9,726	31,598
91	Philadelphia College of Pharmacy and Science	0	30,826
92	Claremont McKenna College	11,284	30,317

	Institution	Life Income Funds	Endowment Funds
93	University of Alabama System	$ 0	$ 29,120 (S)
94	Colby College	2,040	29,104
95	Davidson College	400	28,906
96	University of Vermont	270	27,644
97	Columbia University Teachers College	227	26,309 (A)
98	Lawrence University	0	26,150
99	Denison University	3,477	25,567
100	University of Denver	2,507	25,351
101	Ohio University	0	25,155
102	University of Tennessee (Knoxville)	9,638	24,616
103	Simmons College	0	24,448
104	Berry College	34	24,012
105	College of Wooster	0	23,912
106	Howard University	0	23,059
107	Spelman College	0	22,721
108	Bates College	1,215	22,200
109	George Washington University	0	21,187
110	Marquette University	61	21,031
111	Rhode Island School of Design	56	20,670
112	University of Utah	466	20,404
113	Ohio Wesleyan University	1,799	20,363
114	Sweet Briar College	0	19,932
115	University of Maryland	0	19,501
116	Pennsylvania State University	0	18,848
117	Cornell College	0	18,665
118	Auburn University	0	18,511 (S)
119	Saint Mary's College (Indiana)	0	18,357
120	Mercer University	316	18,208
121	North Carolina State University	0	17,957
122	Hendrix College	1,488	17,879 (J)
123	Dickinson College	1,252	17,855
124	University of Puget Sound	1,713	17,815 (A)
125	Furman University	2,152	17,711 (M)
126	Birmingham Southern College	0	17,615
127	Knox College	503	17,573
128	University of Tulsa	81	17,495 (M)
129	University of Arizona	0	16,986
130	Franklin & Marshall College	2,752	16,825
131	Endowment Association of College of William and Mary	274	16,634
132	Wheaton College	484	16,381
133	Michigan State University	72	16,305
134	Pratt Institute	0	16,130 (A)
135	Alma College	145	15,771
136	Reed College	2,339	15,220
137	Wittenberg University	5,356	15,199
138	American University of Beirut	14	15,183
139	Clark University	1,534	15,128
140	Oregon State Board of Higher Education	0	14,901
141	Baldwin-Wallace College	820	14,750
142	Kalamazoo College	1,041	14,579
143	Indiana University	991	14,076
144	University of Nevada System	517	13,746
145	Wentworth Institute of Technology	0	13,695
146	Connecticut College	0	13,130 (M)
147	Allegheny College	539	12,495
148	Temple University	0	12,187
149	Drake University	168	11,523 (M)
150	University of Maine	0	11,307
151	University of Tennessee (Chattanooga)	0	11,279
152	University of Dayton	0	11,132

	Institution	Life Income Funds	Endowment Funds
153	Norwich University	$ 119	$ 10,941
154	Washburn College	0	10,560 (D)
155	Clarkson College	346	10,475
156	University of Iowa Foundation	3,377	10,246
157	Muhlenberg College	0	10,199
158	St. Norbert College	0	9,698
159	Bryant College of Business Administration	0	9,280 (J)
160	Wells College	182	8,943
161	Babson College	173	8,468
162	Skidmore College	849	8,094
163	University of Arkansas (Fayetteville)	244	7,933
164	Alfred University	118	7,905
165	Doane College	354	7,820
166	Ohio Northern University	0	7,646 (A)
167	College of William and Mary	0	7,608
168	Rollins College	244	7,505 (M)
169	Hope College	3,186	7,460
170	Moravian College	148	6,869
171	University of Scranton	0	6,411 (M)
172	Rockhurst College	143	6,392
173	University of Nebraska	0	6,366
174	University of Akron	416	5,956
175	University of Evansville	65	5,864
176	Washington State University	47	5,787
177	Otterbein College	307	5,065
178	Medical College of Pennsylvania	292	4,601
179	Kenyon College	475	4,318
180	Russell Sage College	1,604	3,840
181	Chapman College	633	3,554 (M)
182	Canisius College	94	3,482
183	Philadelphia College of Textiles and Science	0	3,478
184	Western Michigan University	867	2,680
185	Trinity College (D.C.)	100	2,635
186	Arizona State University	456	2,352
187	University of Massachusetts	0	2,238
188	University of Tampa	71	2,222
189	Monmouth College	0	2,218
190	Newberry College	0	2,124
191	Eastern Michigan University	44	1,881
192	University of Connecticut	0	1,717
193	University of Mississippi	0	1,713
194	Ocean County College	0	738
TOTAL		$626,041	$16,892,635

Note: (A) = Figures are as of August 31, 1982
(D) = Figures are as of December 31, 1982
(J) = Figures are as of July 31, 1982
(M) = Figures are as of May 31, 1982
(Mr) = Figures are as of March 31, 1982
(S) = Figures are as of September 30, 1982

Summary of Performance of Endowment Funds

The purpose of the NACUBO Comparative Performance Study is to aid administrators in evaluating their investment pool's performance. It is believed that measuring comparative performance among pools with similar characteristics, objectives, and risk levels can add an important, useful dimension in reviewing the investment results achieved with respect to meeting performance goals.

- For the year ended June 30, 1982, the 218 college and university pools participating in

this study had an average rate of return of −0.9%. This rate of return exceeds the −1.8% expected total return earned by a composite of the S&P 500 Index, the Lehman Brothers-Kuhn Loeb Bond Index, and the average treasury bill rate using the same asset composition as the average investment pool (52.4% in equities, 28.0% in long-term bonds, 13.8% in cash and equivalents, 2.7% in real estate, and 3.1% in other assets).

- The study also shows that for the three-year period ended June 30, 1982, the average rate of return of the college and university pools of 8.3% exceeded the composite market index of 6.0%. And, for the five-year period ended June 30, 1982, the average return for the investment pools of 7.7% was higher than that earned by the composite index, which was 5.7%.
- In terms of investment objectives, those pools with a total rate of return objective underperformed those with balanced and income objectives. The opposite was true for the three- and five-year periods ended June 30, 1982. The total rate of return pools, on average, were 61% invested in equities over the past five years while the balanced pools were only 50% invested in equities.
- The study reveals that, on average, the larger pools (over $50 million) underperformed the middle pools ($10-$50 million), which underperformed the smallest pools during the past year, though the opposite was true for the three-, five-, and ten-year periods measured. For the last five years the groups had average equity positions of 59%, 55%, and 47% for the largest, middle, and smallest pools, respectively.

Table 2

Average Performance by Period

	Period Ended June 30, 1982			
	One Year	Three Years	Five Years	Ten Years
All investment pools measured	−0.93%	8.31%	7.70%	5.21%
By investment objective				
Total return pools	−2.17	9.29	8.62	5.07
Balanced or income pools	−0.10	7.62	7.07	5.31
By size				
Over $50 million	−1.63	9.05	8.46	5.54
$10 to $50 million	−1.20	8.49	7.92	5.18
Under $10 million	0.28	7.10	6.41	4.83
Comparative indexes				
Dow Jones Industrial Average	−11.70	4.88	3.45	3.70
S&P 500 Index	−11.76	7.68	7.19	4.79
Salomon Brothers Bond Index	7.43	−3.85	−1.23	2.76
Lehman Brothers-Kuhn Loeb Bond Index	9.04	−1.18	0.64	n/a
Other benchmarks				
The Common Fund for Equity Investments	−13.25	11.31	12.72	5.35
The Common Fund for Bond Investments	10.98	0.10	2.30	n/a
Inflation benchmarks				
Consumer price index	7.08	10.25	9.68	8.51
Higher education price index	9.92	9.88	8.81	7.80

- Those investment pools managed externally during the year ended June 30, 1982, performed about two percentage points poorer than those pools managed internally. During the years ended June 30, 1981 and 1980, investment pools managed externally performed, on average, about two percentage points than those managed internally. In 1979, results were about equal, and for each of the two previous years, the internally managed pools outperformed those managed externally.
- In fiscal 1982, investment pools with higher-than-average bond turnover rates underperformed, on average, those pools having lower turnover rates. Pools with the highest equity turnover performed better than those pools with the lowest turnover.

- Investment pools underperformed inflation as measured by the Consumer Price Index (CPI) and the Higher Education Price Index (HEPI) for the one-, three-, five-, and ten-year periods ended June 30, 1982.

Because endowment funds are invested on a long-term basis, it is important to consider investment returns beyond just one year. In Table 2, information is provided on the performance of endowment funds over a series of different time periods. The appendix provides a detailed listing of the performance of all participating institutions, with funds coded for confidentiality.

Although investment performance figures are important and meaningful, this information can be both misinterpreted and overemphasized. Modern investment theory suggests that risk and return are related, and that the amount of return obtained in an investment portfolio is directly influenced by the degree of risk taken. This means that while one institution might achieve a higher (or lower) return than another, this return typically results from a combination of actions, including the allocation of investments among different types of assets, the degree of risk taken, the emphasis on different types of assets within each investment category (e.g., high-yield stocks vs. growth stocks, high-quality vs. low-quality bonds, etc.), and the selection of particular stocks, bonds, and other investments.

While one year is too short a period from which to draw any significant conclusions regarding performance, for the year ended June 30, 1982, 96% of the 218 pools in the CPS outperformed the Dow Jones Industrial Average (the 194 institutions provided data on a total of 218 separate pools). This widely followed benchmark should not be the sole measure used to compare the performance of the average investment pool. A better measure, but still not completely representative for comparative purposes, is the S&P 500 Index. Ninety-six percent of the 218 pools also outperformed the S&P 500 in 1981-82, which was a period of declining stock prices. This is not surprising, since most pools maintain a balanced investment mix, and are not totally invested in stocks. Virtually all of the endowment investment pools underperformed both the Salomon Brothers Bond Index and the Lehman Brothers-Kuhn Loeb Bond Index. This too is not surprising, as the large stock component of funds probably hurt performance. For those few pools totally invested in either common stocks or long-term bonds, a direct comparison to the S&P 500 Index or either bond index, respectively, is more valid.

What should be of interest and concern to trustees and those administrators responsible for an investment pool is the return achieved from a blend of market indexes that mimics that of their own pool. In the case of the average pool, this means the return achieved as a result of the investment of its 52% stock component, 28% bond component, 14% cash component, 3% real estate component, and 3% miscellaneous assets component. On this basis, the one-year return of −0.93% for all pools appears favorable compared with the return of −1.78%, which might be expected on the asset components of the pool shown in Table 3.

Table 3

Estimated Asset Component Return of All Investment Pools for the One-Year Period Ended June 30, 1982

Asset Component	Index	Fiscal 1981-82 Total Return Percentage	Average Investment Pool Asset Component	Expected Total Return
Stocks	S&P 500	−11.76%	52.4%	−6.16%
Bonds	Lehman-Kuhn Loeb	9.04	28.0	2.53
Cash	Average Treasury Bill	13.41	13.8	1.85
Real Estate	n/a	0	2.7	0
Miscellaneous	n/a	0	3.1	0
Total			100.0%	−1.78%

Asset Composition

The decision as to what should be the asset composition (or amount invested in stocks, bonds, etc.) of the endowment fund is typically a policy action dictated by each institution's governing board or investment committee. Sometimes this decision is determined in conjunction with the advice of an institution's portfolio manager. Table 4 shows the asset composition of reporting investment pools as of June 30, 1982. The average pool in the 1982 CPS has about 48% of its assets invested in stocks. Some endowment funds are almost totally invested in stocks, others hold a balance on investment assets, and a few have heavy weightings of bonds or real estate. Both the expected return and volatility of any given investment portfolio will be a function of its asset composition, and each institution will typically establish a permissible allocation of assets as a function of its own need for income and growth of principal. As an example, a need for predictable, stable income will require of investments a certain percentage in bonds, although investment in the stock market might produce a higher total return.

Table 4

Asset Composition of Investment Pools by Objective and Size
At June 30, 1982

	By Investment Objective			By Size		
	All Pools	Total Return	Balanced	Over $50 Million	$10 to $50 Million	Under $10 Million
Stocks	48.1%	53.2%	44.4%	50.3%	48.7%	44.2%
Bonds	30.6	25.0	34.5	28.8	28.4	36.5
Cash	15.4	15.9	15.1	13.7	15.8	16.6
Real Estate	2.7	1.9	3.3	2.8	3.4	1.5
Miscellaneus	3.2	4.0	2.7	4.4	3.7	1.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

NACUBO compares the asset composition of investment pools from year to year and monitors changes in concentration. The net change in asset composition results from a combination of two factors: the general change in stock, bond, and other asset prices and a shift in investments. Using the change in market indexes, an expected change in the value of assets can be computed. When actual compositions are reported for the following year, a comparison can then be made between the expected change and what actually occurred, with net differences computed that can be assumed to have occurred due to policy decisions, such as a change in investment strategy. For the year ended June 30, 1982, endowment funds in general again exhibited a shift in emphasis, increasing bonds 3.0% while decreasing stocks 4.4%, as shown in Table 5.

A characteristic related to the composition of the portfolio is diversification of the securities held within each asset category. Some investment portfolios are quite diversified and reflect stock holdings that mirror the market in general. Other investment pools ordinarily concentrate investments into particular industries or segments of the marketplace. Most investment pools are well diversified in their stock and bond holdings: the typical endowment portfolio holds about 50 different common stock names, with even more names included as the size of the portfolio increases; about 25 different bond names are included in the typical endowment portfolio.

Risk Measurement and Return

According to modern investment theory, risk and return are directly related. There are several different techniques to measure risk. One technique assumed to be a proxy for risk is to compare the fluctuation of the portfolio to that

Table 5
Change in Asset Composition: 1974 through 1982
(Percentage Change — Year Ended June 30)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	Total
Stocks	−4.0%	−1.2%	−2.2%	−1.1%	−4.8%	−3.3%	−2.3%	−2.0%	−4.4%	−25.3%
Bonds	1.3	3.9	4.2	0	0.6	1.3	2.6	2.4	3.0	19.3
Cash	3.0	−2.9	−1.7	1.0	−4.2	1.9	−0.6	−0.7	1.8	6.0
Real Estate	n/a	n/a	n/a	n/a	n/a	n/a	0.4	0.2	−0.3	0.3
Miscellaneous	−0.3	0.2	−0.3	0.1	0	0.1	−0.1	0.1	−0.1	−0.3

of the stock market in general, typically using the S&P 500 Index as the market. This comparison generates a measure called the "beta coefficient," which indicates the percentage fluctuation that can be expected and therefore predicted, based on the relative performance of the market. A beta of 1.00 means that the portfolio is just as volatile as the market in general and should be expected to move in unison with the market, if the assets in the portfolio are well diversified. If the market goes up 10%, then the pool should be expected to go up 10%. A beta of 1.10 means that the portfolio is 10% more volatile than the market, while a beta of 0.90 indicates that the portfolio is 10% less volatile, and therefore should not perform as well as the market in a period of rising prices, nor lose as much when market prices decline. In other words, if a specific portfolio is more volatile and therefore is taking more risk, it is expected that this portfolio should have a return that is greater than the market in general. A higher than average return may not mean that the portfolio has achieved an extraordinary success, but rather it might be simply the return that should be expected for the degree of risk taken. If a specific portfolio has an incremental return greater than what might be predicted by the beta coefficient, the excess return can be explained as the value added by managment. Beta coefficients have been computed for investment pools in the 1982 CPS. The average beta for all pools is .61 for the ten-year period ended June 30, 1982.

In Table 6, beta coefficients are summarized for investment pools in the study. College and university endowment funds appear to be invested for less volatility and risk than the market as a whole. One would expect their performance to be below that of the stock market as a whole in a period of a rising market, as was the case in fiscal 1975, 1976, 1979, 1980, and 1981, and above the stock market in a period of a declining market, as was the case in fiscal 1977, 1978, and 1982.

Table 6
Beta Coefficients

	Ten Years Ended June 30, 1982
All investment pools	.61
By investment objective	
Total return pools	.69
Balanced pools	.56
By size	
Over $50 million	.68
$10 to $50 million	.62
Under $10 million	.52
Comparative indexes	
Dow Jones Industrial Average	.84
Salomon Brothers Bond Index	−.04
S&P 500 Index	1.00

Stock and Bond Turnover

Investment managers buy and sell securities. Some observers of the marketplace believe that very actively traded portfolios, with high turnover and therefore high transaction costs, will produce a lower total return in the long run. NACUBO has been monitoring turnover for the last eight years; for 1982, the stock turnover of the typical endowment fund was 28.0% of the total value of stock invested, the highest rate (but the same as last year) since NACUBO began gathering this data in 1974-75. On average, bond turnover was about 19.6%, with the larger pools having higher turnover. Data accumulated to date do not indicate any correlation, positive or negative, between turnover and performance for endowment funds. It is observed that, in general, endowment funds have lower turnover than other investment pools.

Endowment Characteristics

As part of the ongoing CPS, NACUBO has endeavored to build a data base of information on endowment funds and endowment *wealth*.

One of the most important subjects identified by administrators and others interested in colleges and universities is endowment growth and endowment adjusted for inflation or "real" endowment growth. The decreased size of endowment funds in 1982 appears to be the result of the sharp decline in equity securities and more moderate depreciation in the bond security markets, despite new gifts added to endowment. A crude approximation of endowment growth can be made for the nine-year period ending June 30, 1982. This is portrayed in Table 7 as the NACUBO Endowment Wealth Index ("NEWI"). The calculation is based on information received from prior NACUBO questionnaires and indicates that, as a group, NEWI assets at June 30, 1982, have increased about 40% since June 30, 1973. However, in real terms—when inflation is taken into account—endowment funds have actually declined about 37% based on the CPI and 32% based on the HEPI. To help put this into perspective, Table 7 compares the S&P 500, the Dow Jones Industrical Average, the Salomon Brothers High-Grade Bond Index, and endowment funds both before and after inflation. The Consumer Price Index (CPI) and the Higher Education Price Index (HEPI) were used to adjust for inflation.

Table 7

Appreciation Comparison Of Indexes and Endowment Wealth ("NEWI") Before and After Inflation

	6/30/73	6/30/74	6/30/75	6/30/76	6/30/77	6/30/78	6/30/79	6/30/80	6/30/81	6/30/82	Nine-Year Percentage Change
Dow Jones Industrial Average	891.71	802.41	878.99	1,002.78	916.30	818.95	841.98	867.92	976.88	811.93	8.95%
S&P 500 Index	104.26	86.00	95.19	104.28	100.48	95.53	102.91	114.24	131.24	109.61	5.13
Salomon Brothers High-Grade Bond Index	93.70	80.53	85.26	86.82	92.43	84.64	83.15	73.23	56.43	53.33	−43.08
NACUBO Endowment Wealth Index ("NEWI")	100.00	83.30	91.05	98.52	102.36	103.79	112.09	122.85	139.31	137.36	37.36
Real NEWI based on CPI*	100.00	76.49	75.19	75.96	74.60	70.82	68.94	66.11	68.46	63.04	−36.96
Real NEWI based on HEPI**	100.00	77.48	78.28	79.46	77.52	73.67	73.80	73.60	76.22	68.37	−31.63

* Readers may note that figures for CPI have been changed retroactively to reflect new calculation bases.

** HEPI (Higher Education Price Index) figures from D. Kent Halstead.

Table 7 shows that the rebound from the low 1974 equity markets through June 1981 reversed itself sharply in fiscal 1982. Even with the strong support from gift additions, however, educational institutions are far from whole. That is, $100 of endowment at June 30, 1973, would have the purchasing power at June 30, 1982, of only $63.04 (based on the CPI) and $68.37 (based on the HEPI). Stated another way, endowment would have to rise an additional 60% (or 45%) to maintain 1973 purchasing power in 1982. This devastating loss in purchasing power is being felt throughout the college and university world and helps

explain some of the more recent fiscal problems being experienced by many endowed institutions, especially those that rely more heavily on their endowment to meet current operating expenses.

For independent institutions, questions were asked regarding endowment support for faculty and full-time equivalent (FTE) students. Table 8 summarizes these data.

Because each college and university and its alumni are unique, it is often difficult to draw analogies relating to gift-giving among institutions. It is hoped that data gathered over a long period may be useful in identifying trends. Data on gifts to endowment are included in the detailed CPS.

Table 8

All Independent Institutions — Endowment Support

	Average Institution	Median of All Participants
Endowment principal per FTE student	$ 21,460	$ 13,900
Endowment principal per faculty member	235,150	170,000
Endowment income per FTE student	1,300	850
Endowment income per faculty member	14,825	9,750
Gifts to endowment as percentage of market value	n/a	4.4%

Appendix: Average Annual Total Return Performance of All Pools for the Period Ended June 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C69	0	D	15.69 %	69	9.29 %	92	7.66 %		N/A %
2	C59	29	B	15.22	75	9.17		N/A		N/A
3	E7	48	F	14.64	42	10.83	67	8.44	143	2.31
4	C6	14	D	13.16	36	11.06	57	8.69	64	5.16
5	C7	8	A	12.90	23	11.85	51	9.10	122	3.61
6	C11	72	C	12.86	2	17.72		N/A		N/A
7	C60	57	B	12.38	33	11.15	29	10.47	19	7.50
8	C85	31	D	11.99	89	8.60	65	8.47	43	5.72
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
9	C30	43	E	10.70	38	10.96	62	8.49	47	5.60
10	C74	12	D	10.38	57	10.06	20	11.18	8	9.27
11	E87	5	F	9.79	205	2.59	192	2.74	103	4.12
12	C81	72	C	9.75	28	11.64		N/A		N/A
13	E58	43	D	9.60	140	7.09	145	6.03	33	6.15
14	C12	88	F	9.51	94	8.46	143	6.09		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
15	E106	29	E	8.77		N/A		N/A		N/A
16	E16	57	D	8.54	4	16.89	9	12.80	18	7.55
17	C67	27	E	8.42	116	7.74	114	7.08	94	4.52
18	E49	52	C	8.16	49	10.32	24	10.85	88	4.61
19	E68	56	C	8.02	65	9.59	63	8.48	101	4.20
20	C90	14	C	7.98		N/A		N/A		N/A
21	C37	24	F	7.77	188	4.58	181	4.25		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
22	C99	72	B	7.32	26	11.71	3	14.32	1	21.63
23	C65	51	C	7.16	13	13.80	23	10.96	10	8.45
24	E111	31	E	6.96		N/A		N/A		N/A
25	E82	38	F	6.43	113	7.79	121	6.72	46	5.66
26	E109	24	F	5.88	157	6.35	165	5.12	125	3.52
27	E80	25	C	5.57	63	9.61	33	10.14	52	5.49
28	C34	57	C	5.54	50	10.31	41	9.69	123	3.59
29	C86	38	D	5.31	82	8.79	78	8.22	15	7.66
30	E110	39	A	5.16	108	8.02	74	8.32		N/A
31	C22	41	A	5.14	37	10.99	45	9.51	60	5.31
32	C70	55	D	5.11	58	10.04	82	8.06	31	6.19
33	C38	33	C	5.04	87	8.61	53	9.06	12	8.04
34	C10	52	F	4.98	203	2.95	174	4.58		N/A
35	C83	33	D	4.85	107	8.04	77	8.24	96	4.38
36	C89	24	D	4.70	143	7.04	126	6.63		N/A
37	C61	39	A	4.63	181	5.10		N/A		N/A
38	C35	51	C	4.54	10	13.95	4	13.85	4	10.65
39	C88	32	D	4.43	66	9.53	79	8.14	50	5.54
40	E83	50	F	4.32	156	6.44	151	5.70	119	3.67

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	C92	23	E	4.30 %	134	7.29 %	111	7.16 %	110	3.90 %
42	E60	51	D	4.27	51	10.26	99	7.48	90	4.59
43	C9	51	A	3.81	95	8.44	110	7.18	53	5.49
44	E84	35	F	3.80	104	8.15	89	7.85		N/A
45	E35	59	C	3.80	97	8.36	103	7.40	133	3.12
46	E113	65	F	3.62		N/A		N/A		N/A
47	C64	20	E	3.44	158	6.33	160	5.39	55	5.40
48	E28	17	A	3.28	183	4.99	135	6.33	106	4.06
49	E51	47	C	3.10	47	10.44	25	10.69	24	6.84
50	E65	53	C	3.04	39	10.94	55	8.99	54	5.45
51	C50	48	F	3.02	121	7.50	117	6.87	78	4.77
52	E50	29	C	2.87	9	14.05	18	11.48	137	2.77
53	E22	38	D	2.82	198	3.53	187	3.79	83	4.70
54	C20	55	B	2.79	84	8.68	83	8.05	41	5.73
55	E20	46	C	2.68	17	13.18	37	9.99	22	7.39
56	E88	14	F	2.68	210	-1.36	195	0.53	121	3.66
57	E23	44	F	2.59	202	3.14	183	4.09	146	2.09
58	C62	70	D	2.58	207	2.29	189	3.46		N/A
59	C54	37	A	2.56	44	10.74	5	13.70	11	8.15
60	E115	66	E	2.53		N/A		N/A		N/A
61	C19	49	D	2.46	190	4.53	178	4.34		N/A
62	E93	57	B	2.35	16	13.19	27	10.57		N/A
63	E64	57	E	2.30	48	10.39	39	9.80	144	2.29
64	C21	39	C	2.23	85	8.67	149	5.76	138	2.70
65	C46	33	D	2.14	106	8.05	122	6.72	81	4.72
66	C44	57	F	2.12	14	13.29	10	12.66	44	5.69
67	C13	61	D	1.99	7	14.66	2	14.59	2	14.68
68	C36	41	E	1.94	175	5.51	163	5.19		N/A
69	E9	32	E	1.83	195	4.03	171	4.82		N/A
70	E41	40	E	1.77	189	4.54	184	4.07	142	2.34
71	E96	49	B	1.72	71	9.24	88	7.85		N/A
72	E59	44	D	1.65	83	8.78	102	7.41	84	4.68
73	C95	43	E	1.40	78	9.04	87	7.89	56	5.38
74	C18	40	D	1.38	32	11.21	35	10.04	7	9.53
75	C15	54	A	1.36	24	11.80	31	10.20	74	4.92
76	C101	50	D	1.29		N/A		N/A		N/A
77	C75	56	E	1.25	132	7.33	128	6.61	95	4.46
78	E27	54	B	1.10	40	10.89	60	8.54	89	4.59
79	C72	48	A	1.09	125	7.45	109	7.22	13	7.90
80	C58	79	D	1.07	81	8.81	90	7.82	127	3.45
81	C55	77	A	1.05	43	10.81	43	9.59	14	7.76
82	E98	61	F	0.98	46	10.52	50	9.10	36	5.95
83	C17	69	C	0.93	130	7.38	154	5.58	70	5.04
84	E8	54	A	0.91	25	11.74	38	9.94	51	5.50
85	C73	50	F	0.70	159	6.32	162	5.33		N/A

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
86	C43	67	F	0.67 %	6	16.03 %	19	11.48 %		N/A %
87	E100	59	B	0.59	147	6.87	140	6.13		N/A
88	C5	30	D	0.56	168	5.88	137	6.25	58	5.34
89	E29	63	A	0.53	60	9.95	69	8.41	104	4.08
90	E70	63	D	0.52	76	9.14	66	8.46		N/A
91	C1	67	D	0.31	120	7.61	129	6.56		N/A
92	E32	47	C	0.29	141	7.08	142	6.10	79	4.76
93	E48	52	E	0.18	119	7.68	46	9.36		N/A
94	E78	44	D	0.18	185	4.95	173	4.63	85	4.68
95	E114	33	E	0.14	99	8.29	176	4.42	77	4.81
96	E74	59	D	0.05	161	6.15		N/A		N/A
97	C49	51	D	0.01	196	3.98	180	4.26	145	2.23
98	C94	17	D	-0.06	105	8.11	48	9.25		N/A
99	E1	55	A	-0.08	34	11.12	47	9.29	124	3.56
100	C103	49	D	-0.15	124	7.46		N/A		N/A
101	E13	35	D	-0.30	201	3.18	188	3.61	92	4.57
102	E61	64	D	-0.33	96	8.40	125	6.66		N/A
103	C80	60	F	-0.40	111	7.85	138	6.23	126	3.46
104	E90	51	A	-0.42	178	5.47	161	5.37		N/A
105	E31	44	A	-0.47	165	5.94	150	5.70		N/A
106	E18	68	A	-0.51	127	7.43	112	7.13	107	4.05
107	E57	55	A	-0.57	93	8.47	94	7.56	37	5.81
108	C33	48	F	-0.60	204	2.59	191	2.85		N/A
109	C91	51	F	-0.65	200	3.36	185	4.06	132	3.30
110	C100	39	D	-0.79	135	7.27	123	6.69		N/A
111	E73	50	A	-0.79	133	7.29	124	6.68	76	4.84
112	C57	46	C	-0.81	53	10.20	85	7.99	147	1.81
113	C3	57	B	-0.86	184	4.97	179	4.29	105	4.06
114	C41	66	D	-0.87	163	6.07	107	7.33	30	6.27
115	C47	45	D	-0.95	199	3.48	190	3.33	111	3.88
116	E89	37	B	-1.01	5	16.19	17	11.57		N/A
117	E104	60	F	-1.01	109	8.00		N/A		N/A
118	C56	59	A	-1.14	86	8.63	61	8.50	59	5.32
119	E39	52	D	-1.20	176	5.51	159	5.39	128	3.41
120	E72	58	B	-1.22	100	8.25	95	7.55	48	5.58
121	E47	60	B	-1.22	142	7.06		N/A		N/A
122	E44	50	F	-1.24	148	6.86	157	5.47	118	3.71
123	E66	55	C	-1.24	110	8.00	100	7.42		N/A
124	E2	62	D	-1.24	164	6.04	115	7.03	112	3.77
125	C29	57	A	-1.30	70	9.29	97	7.52	91	4.59
126	E6	51	B	-1.31	54	10.15	81	8.07	34	6.01
127	E103	61	E	-1.32	90	8.53		N/A		N/A
128	E42	54	E	-1.32	64	9.61	84	7.99	42	5.73
129	C16	57	C	-1.38	166	5.94	164	5.17	129	3.32

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
130	C8	57	B	-1.46%	68	9.42%	86	7.94%		N/A%
131	E85	44	C	-1.48	137	7.17	116	6.94		N/A
132	C96	44	A	-1.52	187	4.71	120	6.77		N/A
133	C39	45	D	-1.52	171	5.74	152	5.62	148	1.62
134	C79	57	D	-1.62	191	4.44	175	4.44	115	3.74
135	E37	48	B	-1.72	55	10.14	54	9.01	26	6.65
136	C23	56	E	-1.75	1	20.03	6	13.51	35	5.97
137	E95	50	C	-2.01	151	6.70	141	6.11	131	3.30
138	C68	60	A	-2.13	179	5.18		N/A		N/A
139	E24	62	D	-2.27	153	6.59	132	6.49	38	5.78
140	E91	53	F	-2.31	131	7.33	131	6.52	49	5.55
141	C97	44	E	-2.40	118	7.69	194	1.12	109	3.91
142	E67	65	C	-2.44	162	6.10	147	5.92	65	5.15
143	E99	53	D	-2.45	21	12.47	11	12.45		N/A
144	C32	13	E	-2.66	170	5.82	21	11.06	3	11.06
145	E63	59	A	-3.00	91	8.52	64	8.48	114	3.76
146	E69	64	B	-3.00	182	5.01	156	5.54	150	0.68
147	E92	61	F	-3.20	172	5.73	168	5.01	28	6.51
148	C52	51	F	-3.24	174	5.54	146	5.98	66	5.07
149	C71	27	D	-3.39	155	6.48	104	7.37		N/A
150	C78	42	D	-3.45	197	3.96	177	4.37	149	1.30
151	E55	63	C	-3.48	150	6.73		N/A		N/A
152	E17	60	B	-3.65	180	5.15	169	4.99	63	5.18
153	C14	58	C	-3.74	8	14.54	14	12.31		N/A
154	C53	48	F	-3.78	144	7.02	101	7.41		N/A
155	E53	67	B	-3.78	73	9.22	59	8.62	23	6.96
156	C45	62	D	-3.83	122	7.49		N/A		N/A
157	C76	52	D	-4.01	67	9.51	106	7.35	97	4.32
158	E62	68	E	-4.08	102	8.24	91	7.67	67	5.06
159	E14	66	D	-4.33	177	5.51	153	5.60	73	4.94
160	C2	50	B	-4.38	128	7.42	113	7.10	71	5.01
161	E10	67	D	-4.40	152	6.69	136	6.31	140	2.48
162	E36	60	A	-4.47	31	11.28	36	10.01	57	5.34
163	C31	59	B	-4.51	45	10.65	119	6.78		N/A
164	E105	65	F	-4.63	59	10.00		N/A		N/A
165	E81	47	D	-4.72	79	8.87	130	6.54	136	2.99
166	C82	70	B	-4.91	80	8.81	70	8.39	134	3.09
167	E77	55	F	-4.91	192	4.18	167	5.01	113	3.76
168	E71	57	C	-5.13	169	5.84	155	5.58	93	4.55
169	E79	59	D	-5.26	112	7.81	93	7.57	86	4.63
170	C42	70	B	-5.50	72	9.24	80	8.11	120	3.67
171	E40	67	A	-5.57	41	10.87	68	8.42	69	5.06
172	C28	76	C	-5.62	30	11.29	22	11.06		N/A
173	E45	56	A	-5.69	61	9.72	52	9.09	27	6.63

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
174	E108	59	C	-5.70%	173	5.59%	170	4.92%	75	4.89%
175	E30	62	A	-5.93	20	12.89	49	9.12	80	4.76
176	E11	17	A	-6.00	35	11.12	32	10.16	40	5.78
177	C66	59	D	-6.28	12	13.82	13	11.68		N/A
178	E97	64	F	-6.29	194	4.12	166	5.06	29	6.43
179	E4	67	D	-6.59	167	5.89	127	6.63	135	3.02
180	E86	64	D	-6.86	154	6.51		N/A		N/A
181	E21	65	A	-7.24	98	8.33	73	8.32	108	3.95
182	C98	62	D	-7.28	129	7.38	42	9.60	6	9.97
183	E107	66	F	-7.37	193	4.17	172	4.76	72	4.95
184	E76	65	F	-7.37	149	6.76	144	6.08	98	4.26
185	C84	29	C	-7.64	208	-0.02	193	1.57	139	2.51
186	E38	66	A	-7.70	103	8.18	98	7.50	32	6.15
187	E46	80	A	-7.81	123	7.48	96	7.54	102	4.20
188	C87	53	D	-7.96	74	9.21	75	8.27	141	2.43
189	E33	75	A	-7.96	101	8.25	56	8.79	99	4.25
190	C4	81	C	-8.62	139	7.13	118	6.78		N/A
191	C102	71	D	-8.68	136	7.20		N/A		N/A
192	E56	59	B	-8.80	146	6.92	134	6.38	117	3.72
193	C26	47	E	-8.81		N/A		N/A		N/A
194	E12	59	F	-8.97	29	11.59	44	9.52		N/A
195	C25	12	A	-9.03	92	8.52	71	8.38	20	7.46
196	E102	72	D	-9.65	3	17.37	1	17.35	9	9.23
197	C93	77	C	-9.82	88	8.60	72	8.34	17	7.56
198	E19	71	B	-9.91	62	9.66	30	10.46	61	5.27
199	C48	60	B	-10.02	56	10.12	26	10.66		N/A
200	E3	68	D	-10.64	186	4.80	148	5.81	100	4.23
201	E101	73	D	-10.85	117	7.73	108	7.28		N/A
202	E52	77	D	-10.95	138	7.13	139	6.18	116	3.74
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
203	E54	71	C	-11.85	18	13.01	7	13.24	45	5.66
204	E43	72	C	-11.89	115	7.74	40	9.74	16	7.63
205	C77	89	A	-12.40	114	7.78	76	8.26	21	7.46
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
206	E5	76	B	-13.28	19	13.01	13	12.37	68	5.06
207	E34	70	A	-13.35	27	11.70	28	10.50	87	4.61
208	C63	77	C	-13.49	22	11.91	12	12.39	62	5.24
209	E25	80	D	-13.52	15	13.25	15	12.09	39	5.78
210	C24	80	D	-13.79	145	6.93	105	7.36		N/A
211	C27	79	E	-13.81	209	-1.03	186	3.97		N/A
212	E26	74	D	-14.05	77	9.12	34	10.08	82	4.71
213	E75	74	C	-14.53	126	7.44	133	6.46	25	6.69

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
214	C40	51	E	-14.61%	52	10.25%	58	8.65%	5	10.32%
215	E112	72	C	-14.72		N/A		N/A		N/A
216	E94	73	D	-15.35	11	13.93	8	12.92		N/A
217	E15	49	C	-15.61	160	6.28	158	5.46	130	3.31
218	C51	59	F	-16.53	206	2.30	182	4.15		N/A
AVERAGE		218		-0.93%	210	8.31%	195	7.70%	150	5.21%

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